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AUTHOR Boehme-Duerr, Karin
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ABSTRACT

American and German children were asked to judge and talk about different mass media--television, radio, and picture books--and their use of each media. Analyses of the data indicated that five- and six-year-olds have qualitatively different concepts of media characteristics and functions than three- and four-year-olds, i.e., the younger children prefer picture books while the older ones also appreciate television, and younger children pay more attention to content. A slightly negative correlation was found between television use and knowledge, but this finding should be interpreted cautiously because other factors that could be influential were not controlled in this research. Finally, significant differences were found between American and German children's conceptions of television, but these differences may be due to the different media presentations in the two countries. (48 references, 32 in English, 14 in German, 1 in French, and 1 in Dutch) (Author/EW)

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BOOKS ARE 'LITTLER' THAN TV*

By
Karin Boehme-Duerr, Ph.D.
Universitaet Muenchen
Institut fuer Kommunikationswissenschaft
Schellingstr. 33
8 Muenchen 40
West-Germany
Tel. 089-2180/3227

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BOOKS ARE 'LITTLER' THAN TV.

American and German children talk about picture-books, radio, and TV.

Karin Boehme-Duerr*

American and German children were asked to judge and talk about different mass media. Three findings of this research are noteworthy: firstly, five- and six-year olds have qualitatively different concepts of media characteristics and functions than three- and four-year olds. Secondly, there are slightly negative correlations between media use and media knowledge. This finding, however, should be interpreted cautiously because other factors which could be influential were not controlled in this research. Thirdly, there are significant differences in media conceptions between American and German children. They can be explained by different media presentations in the two countries.

*Karin Boehme-Duerr (Ph.D., University of Nijmegen, The Netherlands, 1983) is Assistant Professor in the Department of Communication at Munich University, W.-Germany. Her research interests include conceptions of media by children and adults, media-specific effects, verbal and nonverbal communication.
Author's address: Universitaet Muenchen, Institut fuer Kommunikationswissenschaft (Zeitungswissenschaft), Schellingstr. 33, 8 Muenchen 40, W.-Germany.

Introduction

A child care center in the North American city Minneapolis. Four-year old Jonathan talks. What is most boring: TV, radio, or picture-books ? Jonathan does not contemplate this question and answers quickly: "Picture-books." Why ? "Because you can only read 'em and look at 'em. That's no fun."

A change in place and time. A child care center in Munich, West-Germany. Four-year old Stephan answers the same question as Jonathan. For the little German boy TV is most boring: "because there are news from "Bundes" ('federal' like in 'Federal Republic'), they are always so long. That's so boring !"

Even small children like Jonathan and Stephan have clear and articulate conceptions of media. However, we know very little what these conceptions look like (for research in this area, cf. Jaglom and Gardner 1981; Vibbert, Jaglom, Gardner, and Wilder 1980; Jaglom, Fagre, and Wilder 1980).

How do three-, four-, and five-year olds judge radio, TV, and picture-books ? What do they know about these media ? Is there a difference between American children (who get a wide range of programs with a comparatively narrow range of content) and German children (who receive a narrower range of radio and TV programs and who possess fewer picture-books)¹ ?

The research which is reported here is part of a bigger project in which American and German children as well as adolescents and adults are asked how they appreciate

and use traditional media (such as TV, newspapers, books, radio, records, and cassettes) and 'new media' (teletext-like systems, interactive searchable data base systems, and computers).

This study has three research goals. Firstly, it is asked: How develop conceptions of different media with increasing age ? The second question is whether media use (the time spent with a medium) and media conceptions correlate. The third goal is a comparison between American and German children.

In the last five years a number of articles/books were published which focus on media preferences of children and adolescents. These studies were done in different countries: in Switzerland (Bonfadelli 1986a), in Austria (Luger 1985), in Turkey (Erdogan 1985), in Israel (Salomon 1983a, 1983b; Salomon and Leigh 1984), in Great Britain (Cullingford 1984; Wober 1984), in the United States (McMane, Krendl, and Fitzmaurice 1986; Haefner, Hunter, and Wartella 1986; Cojuc 1984), and in West-Germany (Bonfadelli 1986b). Still, most of these studies differ from the one here mainly in two respects. In the other studies school children and adolescents were surveyed but not preschool children. Moreover, nearly all studies concentrate on just one country (exceptions are the ones by Gavriel Salomon who studied American and Israeli children but just looked at the contrast TV and print). Up to now there are no direct comparative data from preschool children in countries with different media choices.

Therefore American and German preschool children were selected for this study. Still, such a scientific approach

has considerable weaknesses. Are three- and four-year olds, who have often or at least sometimes problems understanding adults, capable of grasping what the researcher wants to know ? Can such small children already differentiate among media or reason about their preferences and dislikes ? Do they not have difficulties in estimating correctly the time which they spend with a medium ? Is it possible at all to ask American and German children the same questions ?

Research Goals and Requirements

In this research adults are not the main actors. Children shall talk themselves the thoughts they have about media. Although other research questions necessitate that adults (researchers, parents, educators) observe the direct effects of media on children, in this study questioning is the only direct way. Standardized Piagetian interviews are most appropriate.

Because most of the three- and four-year olds cannot process adequately complex sentences, comparisons of several concepts, and unusual words (Bishop and Bourne 1985; Szagun 1980) there was a pretest which showed that it is feasible to offer pictures (of picture-book, radio, and TV) as facilitation for their decisions. Not recommendable are "real" media because at preschool-age it is still very difficult to abstract from a very specific medium.

Preschool children sometimes give random answers and react often to the last part of a question. In order to minimize these effects/there was randomization

and a testing-the-limits for nearly all questions. Thus, it was not only asked: "Which one is... ?" but also "Why ?". The children were told to justify their answers. It was expected that three- and four-year olds have considerably more difficulty than five-year olds. This is due to awareness processes which evolve in the transition from the preoperational to the concrete operational period, i.e. between four and eight years (c.f. e.g. Yussen 1985; Hakes 1980). At this age children acquire the ability to focus their attention at one point of time on more than one aspect. This is precisely what children have to do when they have to reason about their decisions.

Although most direct media effects in children and adults are unconscious, automatic processes (Dorr 1986; Dahlgren 1986; Boehme-Duerr 1986a,b,c) reflective verbalizations are rather frequent in media effects research. A basic assumption in this research is that media awareness (i.e. explicit reflections on media structures and functions) develops with age (especially around the age of four years) and with experience (media use, interpersonal communication).

What influences media awareness ? One hypothesis which is examined is that someone with heavy media use judges media better and knows more about them than someone with light media use (for contradictory findings, cf. Berg and Kiefer 1987, 1982; Bower 1985, 1973; Steiner 1954).

How can we measure media use in preschool children ? There are basically five methods: for technical media objective measurement of set use, questions to the child, questions to parents or other caretakers, diary records, and lastly observation (by VCR or by researchers). All five methods are deficient and a combination of them is the best (Boehme-Duerr in press). With objective measurement of set use (in West-Germany since 1985 with so-called "GfK-meters"², in the United States "people meters" were introduced in 1985³) only the set use time for each viewer/listener is registered but not the actual viewing or listening time. Set use time is not the same as viewing or listening time. The American media researcher Daniel Anderson and his co-workers observed in about one hundred families that fourteen percent of the time the TV was turned on nobody was in the room. Even when favorite programs come on preschool children prefer other activities to the TV (Anderson, Lorch, Field, Collins and Nathan 1986; Anderson and Field 1983).

To ask preschool children themselves how much time they spend with media is a hopeless task because children at that age have no precise concepts of time (Piaget 1955). To ask parents or other caretakers is also risky. Not only because of memory problems but also because different media have different prestige. A study by the author revealed that German middle class parents rate books nearly always better than TV. Therefore parents could underestimate the time which the child spends with the TV and overestimate the time spent with (picture-)books.

With diaries (every fifteen minutes specific activities are written down on preprinted sheets) people forget often to write down their activities. The American audience research of the A.C.Nielsen Company (which decides over \$ 500 million in network advertising billings) consisted until 1986 mainly of two measurements. Television sets of 1.700 selected families are wired to an "Audimeter" which records set use and program channel (although with this kind of measurement one cannot distinguish among individual family members) and secondly, diary records of 850 "representative" families are kept. The meter and diary data from the two panels are combined by Nielsen in one record. Many risks remain with these methods (for an overview, cf. Couzens 1986).

Time-consuming observations by other people or expensive VCRs are also problematic because the knowledge of being observed might change media behavior. This could hold for small children as well. The recording of usage time of looking and reading magazines and books is also very difficult because children sometimes look at them only for a few minutes but several times the day. Thus it is nearly impossible to give reliable and exact time measurements.

Due to time and financial reasons in this research the parents were asked how their children use media. The children were also asked with which they spend most time (picture-books, TV, or radio).

Method

The American research was done in may/june 1984, and the German in july/august 1984. The children of both child care centers belong to middle or lower upper class. Children from academics were overrepresented. In both studies girls represented two thirds of the samples. All in all sixty three-to-six year olds (and their parents) were asked. Two German children could not be analyzed (it was later noticed that their age classification had been incorrect). Thus the American group consisted of thirty children and the German of 28. Both groups were subdivided: into three- to four-and-a-half year olds (age group 1) and in four-and-a-half to six-year olds (age group 2). In the following age group 1 will also be called the group of the "four-year olds" and age group 2 the group of the "five-year olds".

In this research each child was asked separately what he or she thought about radio, TV, and picture-books. His or her answers were recorded on tape and later transcribed. The questions for the children as well as the ones for the parents were identical in the Minneapolis and in the Munich study. Nonverbal behavior (such as pointing or nodding) was written down. Basically five areas were studied:

1. Familiarity with different media: Here the children had to identify media on pictures, tell how they spend most of their time and which medium they know best.

2. Preference for a medium: The preference question was asked twice, at the begin and at the end of the research; the children were also asked what they would miss most.

3. Conceptions of media functions: e.g. "What can one do with picture books ?"

4. Conceptions about cognitive and emotional media effects: e.g. "Which one is most difficult to understand ?" or "Which one makes one most happy ?"

5. Knowledge about media-specific characteristics: e.g. "Which one has music, language, pictures ?" or "Which one can hear you ?"

In the parent questionnaire it was asked how many different media are accessible for children and how they use them. Most questions concerned radio, TV, and picture-books.

Results

How does media awareness develop ?

1. In the picture identification task all children recognized radio, TV, and the picture-book (ceiling effect). Out of ten media pictures which were shown to the children (and which were correctly identified by adults) there was one statistically significant age effect in American children (but not between the two German groups). The four-year olds have more difficulties in identifying the newspaper than the five-year olds ($X^2 = 5.11$, $df=1$, $p<.05$).

2. Four-year old American and German children prefer picture-books (to radio and TV). In five-year olds the preferences are not the same for the two national groups. Whereas most of the German children (group 2) (85%)

still vote for picture-books, the Americans like TV most (40 %). The preferences were very stable, i.e. children rarely changed them during this research. About one third of the children was, however, hesitant or changed their opinion.

Similar results were obtained for the question which of the three media they would miss most. Only the American five-year olds voted for the TV, the three other groups for picture-books. Why ?

The "picture-book" children said that they love to look at picture-books because the pictures are so beautiful and "because mommy reads with me". Only one of the "picture-book" children, a boy in Munich, referred to a special picture-book (with "Pumuckl"). Although the American five-year olds who liked TV so much named titles of special TV-series (Muppets, Sesame Street, Star Wars, Star Trek) the German children with a preference for TV, surprisingly, could not. They like TV "because one can watch and see so much". Special programs were not referred to.

Radio is the medium which preschool children like least (Americans: 19 %; Germans: 7 %). Those who listen do so mainly "because of the beautiful music".

3. To the question "what can one do with radio, TV, or picture-books ?" answers of all groups include technical handling ("turn it on", "turn it off", "push the buttons", "turn the pages"). This finding agrees with young children's preference to play with television knobs (Joerg 1987; Lemish 1987). Only when children are older do they

give content-related answers. A German child: "You can listen to the weather report on the radio, if it will snow, if there will be blizzards or whatever", an American child: "You can watch when the space shuttles go up". Just as content-related answers increase in older children, media-irrelevant answers decrease. An American child: "You can hold it (TV)", another American: "You can lift it up and go to California (radio)"; a German child: "One can take it away (picture-book)", another German: "Drive to the next shop with it (radio)".

4. Not the TV but picture-books are generally considered to offer most fun. But among American children TV ranks directly after picture-books. There are statistically significant correlations between fun and preference media ($C=.613$, $C_{\max}=.816$, $X^2=34.30$, $df=4$, $p<.001$) and between fun media and media which make one happy ($C=.43$, $C_{\max}=.816$, $X^2=12.82$, $df=4$, $p<.02$). The explanations for these attitudes are different for picture-books, TV, and radio. Children who think that picture-books are most fun and who think that they make them most happy, refer mostly to pictures and to the close link with their mother. Children who name TV as the fun and happy medium argue that they like to watch, that there are special shows and cartoons (American children) and TV is associated with activity (a German child: "There is always something going on", an American child: "It keeps you busy").

The most boring is the radio. Moreover, it makes children "most sad". Why ? The German children said: "There is no children's program" (German radio offers children's programs only at special times), "too much language" or "only rubbish". The Americans argued: "I don't like hearing the news, that's for adults", "I have to listen to it every morning!", or "sometimes it only talks...". Evidently children miss programs which are appropriate for their age. However, most of them cannot specify what such programs should be like. Most of the German girls and boys prefer children's programs and American pop music (the biggest favorite in summer 1984 was Michael Jackson who appeared in many answers and stories of the children). In the parent questionnaires it is noteworthy that German as well as American children hardly ever chose radio programs for listening but they often select TV programs. TV is rather boring and sad for German children "because it takes so long". The US-American TV has, in fact, shorter viewing segments, because most shows, news, cartoons, and documentaries are interrupted by commercials (in West-Germany commercials are only available on two of the three public stations, only en bloc, and at special times). The American children who consider TV a sad medium refer to scary or cruel events: "TV makes me sad because of the spooky movies", "sometimes people get hurt and killed", "because Michael Jackson burnt his hair" .

All four groups think that one can learn most from picture-books (American four-year olds: 54 %; American five-year olds: 67 %; German four-year olds: 75 %; German five-year olds: 74 %). German girls and boys think that they can learn least from radio, and American ones from TV (although they value it very highly).

5. To the question what distinguishes radio from picture-books, radio from TV, and picture-books from TV children give answers which are generally similar to the ones they gave when they were asked "What can one do with...?". Most answers refer to formal/technical properties. German children answered: "Radio has lots of different buttons, a loudspeaker", "TV has glass, is heavy, has an antenna", or "The picture-book has a cover and pages." An American child said simply: "Books are 'littler' than TV". Sometimes general functions are named ("for listening, for looking, for reading"). Content related answers (a German: "You can watch 'Biene Maja'"; an American: "Radio tells you news") can be found more often in older children. The differences, however, are not yet significant.

The children were also asked for media-specific characteristics: "Which one of the three - radio, TV, or picture-book - has pictures ?" "Which one music ?" "Which one language ?" (The word "media" had to be avoided since - as another study showed - even nine- to twelve-year olds have very often no clear ideas about that concept). In attributing pictures to the picture-book and music

to the radio all groups had ceiling effects. Language was mostly attributed to TV and radio, but only one third ascribed it to picture-books. The reason is that children at this age conceptualize "language" mainly as "spoken language" but not as "written language" (cf. also Berthoud-Papandropoulou 1976)⁴. Significant age differences could not be found for these attributions.

Statistically not yet significant but strong in its tendency is another result. German and American five-year olds attribute more reality to TV than four-year olds. An American child reasons: "Some people talk in there and you think they are alive", and a German child says: "One thinks one is there, on the street, or in a pub". TV has -according to the opinion of German and American children - most action (a German: "There is much war"; two Americans: "They shoot and play tricky games" and "a lot of sports"). Three German children misunderstood the question: "Which one has most action ?". They answered: "The TV because it is electric".

A media-specific characteristic is the fact that we can see/hear the people on screen, radio, and in the picture-book but they cannot see us (for a discussion and research, see especially Levelt 1981; Dorr 1980). The children were asked to say which of the three media can see or hear them. 80 % of the four-year old Americans and 50 % of the four-year old German children believed that the actors and people on the

screen can see them. They gave comprehensive explanations for these beliefs. A German child described a whole scene: "People live in there, they also sleep in there, they eat...", another one: "These are plastic people which are constructed." American children said, for instance: "They can see me through tiny holes, the anchorman can see me..." or "People have eyes and look at you sometimes, not real people, they are in the movies and are printed and are fixed by cameras." From the point of view of developmental psychology this result is not amazing. Only when they are about five years can children take the perspective of other people and understand emotions, thoughts, and not observable behavior (cf. e.g. Boehme-Duerr 1983, 1985; Selman 1982, 1974). This is also the reason why youngsters often make presents to adults which they themselves like best. When American children grow older they believe less often that the people on screen can see them. The difference between the two age groups is significant ($X^2=4.63$, $df=1$, $p<.05$). However, the German groups do not differ that much. For the other two media, conceptions of a mutual communication exchange are much rarer. Yet, about a third of the four-year old German and American children believe that the radio can hear them. For the five-year olds it is still a quarter of the girls and boys. Strangely enough, the holes of the radio are the door to real life: "People walk in there (and come out again)."

The second research goal is the classification of the relationship between media use and media conceptions. We can assume that there is a mutual influence. The difficulties in measuring media use were already mentioned, i.e. all of the following observations relate to the answers of the parents (mainly of the mothers).

Five results are especially noteworthy. TV is mainly considered here:

1. The American children in the sample have usually over fifty picture-books whereas German have less than 50 (four-year olds generally over 20 but less than 40).

In the apartment/house of the American children three radios were usually available (in Munich only two).

Most American and German children in this sample had just one TV (although more Americans had more than one TV than Germans).

In the daily/hourly media use there was hardly any difference between German and American children. The American children spent all day in child care center whereas the little Germans were only for four hours in their "kindergarten" (usually in the morning).

Both child care centers had no TV, but radio, record player, and cassette recorder. There were no eye-catching differences in the picture-books of the two groups.

The similarity in TV use in the two countries may not only be due to time restrictions but also to the homogeneity of the two groups.

Most children love pop music. The little ones from Minneapolis also love - according to their parents - "classical music". For German children children's programs take second place. American children choose TV programs (cartoons and other programs for children) more often than their German counterparts who like children's programs. Picture-books are often chosen in both groups but not radio programs.

2. There are slight correlations between the time children spend with TV and the claims how well they know TV ($\Phi=.20$, $X^2=3.80$, $df=1$, $p>.05$), on the one hand, and between the time spent with TV and how much they would miss it ($\Phi=.27$, $X^2=7.29$, $df=1$, $p<.05$). However, children who indicate that they spend most of their time with TV do - according to their parents - not use more often TV than other children ($\Phi=.06$).

3. Preference of TV does not correlate with the time spent in front of the screen ($\Phi=.04$). The statements of how much fun TV is correlate slightly with TV use ($\Phi=.15$).

4. Conceptions which concern learning effects by TV correlate slightly with the time spent in front of the TV ($\Phi=.14$). TV use and conceptions about positive TV effects (Which one makes one happy ?) do not correlate ($\Phi=.01$). However, children who think that TV makes one sad use it rarely ($\Phi=.21$).

5. Knowledge about media-specific characteristics and time spent with TV show weak correlations. But not in the way that heavier viewers know more about

TV. Just the reverse: They know less. TV use correlates negatively with knowledge about pictures: $\Phi = -.14$, negatively with knowledge about language: $\Phi = -.09$, and again negatively with knowledge about music ($\Phi = -.04$).

The third and last research goal concerns the difference in media conceptions between American and German children. For that let us look at the five research domains:

1. Familiarity with different media: In the picture identification task there is a significant difference between American and German children. The Minneapolis group recognized the computer much better than the Munich group ($\chi^2 = 18.57$, $df = 1$, $p < .001$). This was probably due to the fact that only the little Americans had an Apple computer in their child care center.

2. Preference for a medium: As mentioned, most American five-year olds named TV as the most attractive and indispensable medium whereas the Germans chose picture-books. The Minneapolis children liked children's programs, series, and saturday morning cartoons most.

3. Conceptions of media functions: There are negligible differences between the two nations.

4. Children from the two countries differ in their estimations about effects of media on emotions. American children say significantly more often than Germans that TV (with its "happy shows" and cartoons) makes

them most happy ($X^2 = 6.48$, $df = 1$, $p < .01$) whereas they say it significantly less frequently than boys and girls from Munich about picture-books ($X^2 = 7.64$, $df = 1$, $p < .01$).

The estimations about cognitive effects showed that American children consider picture-books most difficult and TV the easiest ("You have to read picture-books", "because you just turn it on and watch it").

Does this finding hold also for German children? No, because for the little ones picture-books are easiest and radio most difficult to understand (a German child: "Radio is nothing for children").

German and American children assumed that one can learn most from picture-books. But they could not decide if TV or radio offers the least to learn.

5. Knowledge about media-specific characteristics: In the attribution task Americans say significantly more frequently that TV has music ($X^2 = 5.43$, $df = 1$, $p < .05$). The US-American TV has, in fact, more music than German TV (for instance, in commercials and on music channels). The German children, however, believe somewhat, but not significantly more frequently that TV has pictures. A possible reason is that American children often do not accept fast moving pictures as pictures. Because of the many pictures children attribute more action to the picture-books than Americans. The difference just misses significance ($X^2 = 3.36$, $df = 1$).

Children from Minneapolis consider TV more realistic than the ones from Munich ($X^2=4.9$, $df=1$, $p<.05$). Mutatis mutandis, German children think significantly more often than the Americans that picture-books come closest to reality ($X^2=6.16$, $df=1$, $p<.05$). Also significant ($X^2=3.88$, $df=1$, $p<.05$) is the difference between American and German four-year olds for the question: "Which one can see you ?". The children in the Minneapolis group believed more frequently that the people on TV can see them.

Discussion

The media which have been discussed (radio, TV, picture-books) have been subjects of awareness for American and German children. This paper reviewed research on children's conceptions in different media cultures. However, there is a lack of intercultural studies with preschool children. The present study tried to fill this gap. The American and German children (and their parents) are not considered representative of other populations but they are comparable to each other. Thus, it is problematic to generalize the data of this study. And yet, the results may be fruitful for further discussions and research. It is hoped that the acquisition of media conceptions will be explored more extensively.

In response to the first research question, the findings indicate that even three-year olds are able

to reflect and comment on different media. Three- and four-year olds have qualitatively different concepts of media characteristics and functions than five- and six-year olds. Younger children prefer picture-books whereas older ones also appreciate TV. Radio which is so attractive for teenagers (cf. Bonfadelli 1986a; Wober 1984) is the medium which most preschool children like least. Another difference between the two age groups is the shift in attention from form to content. Technical properties of a medium and formal media-specific characteristics are very interesting for very young children. The older they get the more do they refer to the content of a medium. This finding agrees with the data from studies on media effects in children (cf. Lemish 1987; Meyer 1983).

Most of the results in the present research - such as the beliefs that one can interact with radio and TV or the content-related media descriptions in five-year olds - can be better explained by child development itself (i.e. by the transition from the preoperational to the concrete operational stage) than by children's media experiences (for background information on media-specific results in media-effects research, cf. Sturm 1982).

However, it is an open question whether other factors - such as parental influence or the intelligence of the child - do not also play an important role in

the development of media conceptions. In this research two influential factors were considered: media use of the child and media culture of a country.

The second research question concerns the relationship between media use and media conceptions. In general, American children possess more media than German ones. The measurement of media use (answers from children's parents) is certainly not optimal. Thus, all results on correlations between time spent with media and reflections on media have to be interpreted cautiously. Most of the interrelations are rather weak. Slightly positive correlations have been found between TV use and firstly, claims how well they know TV, secondly, statements how much they would miss it, thirdly, assertions how much fun it is, and fourthly, conceptions about learning effects. Moreover, children who think that TV makes one sad use it rarely. An unexpected result are the minimal but negative correlations between TV use and knowledge about media-specific characteristics. This finding has to be validated in further research because it could be that TV use as well as knowledge about media are directed by a third variable, intelligence, for instance (the present study did not control it). It could be that less intelligent children watch more and know less. If such an influence cannot be found then the reverse relationship between viewing

time and media knowledge is compatible with other results from awareness research: children who master a second language fluently are often less capable to explain the grammatical rules than language learners (Ianco-Worall 1972). Experienced car drivers reflect less on their way of driving than beginners (for discussions, cf. Levelt, Sinclair and Jarvella 1978). We hope to keep in mind that the most important question is not yet answered: Could it be that inexperienced viewers are more conscious of TV than habitual viewers ?

With respect to the last question (conceptions of American versus German children) it was observed that there are differences between the two media cultures.

Availability of a medium can enhance the familiarity with the medium (e.g. American children's identification of the computer). A reason why American five-year olds (but not their German counterparts) prefer TV and claim that it makes one happy could be that American programs are more similar to commercials (short, fast-paced sequences) than German programs.

As to the findings on conceptions about cognitive effects the results of the American group (three- to six-year olds) agree with those of the Israeli media researcher Gavriel Salomon who asked American and Israeli school children (sixth graders) how difficult TV or print media are for them. For

children in the US and in Israel it was observed that "TV is easy and print is tough" (Salomon 1984, 1983a,b; Salomon and Leigh 1984) whereas little Germans think that picture-books are easiest and radio is most difficult to understand. A possible explanation is that German children in this group spent only half a day in the child care center (the Americans all day) and that German mothers may have more time to read with their children (thus print seems to be easy and comfortable). The differences between American and German children do not hold for older children. Unpublished studies by the author reveal that older German children (six- to sixteen year olds) judge in the same way as Salomon's American and Israeli children.

American preschool children think more often that TV is real and realistic than German ones. People who are familiar with American children's programs can understand why that is so. An example: At the beginning of the program 'Mr. Rogers' Neighborhood', a popular program for children, Mr. Rogers asks the little viewers: "How are you today ?", after a while he says: "That's fine." A little bit later he asks the children, for instance, to jump. After a few minutes Mr. Rogers is pleased: "Well done". Such a pretended interaction between actor and viewer -which can similarly be observed in American news- generally cannot be observed on German TV. Is it amazing that the little ones think that Mr. Rogers

can see them ?

Clearly, this research poses more questions than it answers but it might be a first step on a long way.

Footnotes

¹Broadcasting in Germany is mainly conducted by public-law corporations. The broadcasting corporations are independent of the governments. German broadcasting is organized on a federal basis and thus conforms to the constitution of West-Germany. As to differences between the German and the American media systems (cf. Schoenbach 1985; Winckler 1984).

²"GfK" stands for "Gesellschaft fuer Konsum-, Markt- und Absatzforschung". The "GfK" is comparable to America's "A.C.Nielsen Company" and Britain's "AGB" (for an overview, cf. Buss and Darkow 1985).

³As to the competition between AGB and Nielsen, cf. Couzens 1986.

⁴American research about some new Sesame Street programs in summer 1986 prove observations which psycholinguists (e.g. Berthoud-Papandropoulou 1978) know from a number of studies: Preschool children rarely know what the concepts "word", "sentence", "letter" or "language" mean (Ellen Wartella, personal communication).

Bibliography

Anderson, D.R., Lorch, E.P., Field, D.E., Collins, P.A., Nathan, J.G. (1986). Television Viewing at Home: Age Trends in Visual Attention and Time with TV. Child Development, 57, 1024-1033.

Anderson, D.R. & Field, D.E. (1983). Children's Attention to Television: Implications for Production. In: Meyer, M. (Ed.), Children and the Formal Features of Television. Muenchen: Saur.

Berg, K. & Kiefer, M. (Eds.) (1982). Massenkommunikation II. Eine Langzeitstudie ueber Mediennutzung und Medienbewertung 1964-1980. Frankfurt: Schriftenreihe Media Perspektiven Bd.2.

Berg, K. & Kiefer, M. (Eds.) (in press). Massenkommunikation III. Eine Langzeitstudie ueber Mediennutzung und Medienbewertung 1964-1985. Frankfurt: Schriftenreihe Media Perspektiven Bd.9.

Berthoud-Papandropoulou, I. (1978). La réflexion métalinguistique chez l'enfant. Unpublished doctoral dissertation. University of Geneva.

Boehme-Duerr, K. (in press). Schwierigkeiten bei der Erfassung von Mediennutzung und Medienbewertung. In: Deutsches Jugendinstitut, Medien im Alltag von Kindern und Jugendlichen - Methoden, Konzepte, Projekte. Muenchen: DJI.

Boehme-Duerr, K. (1986). Video-Rueckmeldung in der Journalistenausbildung. In: Langthaler, W. & Schneider, H. (Eds.), Video-Rueckmeldung und Verhaltenstraining. Muenster: MAKS. (cited as Boehme-Duerr 1986 a).

- Boehme-Duerr, K. (1986). Was Kinder wirklich von ihren Medien halten. Televizion, 0, 10-14. (cited as Boehme-Duerr 1986 b).
- Boehme-Duerr, K. (1986). Children's Conceptions of Different Media. Paper Presented to the 1986 International Television Studies Conference, London, July 1986. (cited as Boehme-Duerr 1986 c).
- Boehme-Duerr, K. (1985). Zeichenwandel und Bewusstseinswandel. Zeitschrift fuer Semiotik, 7, 1/2, 81-97.
- Boehme-Duerr, K: (1983). Rolle und Funktion kindlicher Selbstreflexion und Perspektivenuebernahme fuer den Erwerb von Handlungsstrategien. Unpublished Manuscript. University of Munich.
- Bonfadelli, H. (1986). Jugend und Medien. Befunde zum Freizeitverhalten und zur Mediennutzung der 12- bis 29jaehrigen in der Bundesrepublik Deutschland. Media Perspektiven, 1, 1-21.(cited as Bonfadelli 1986 a).
- Bonfadelli, H. (1986). Uses and Functions of Mass Media for Swiss Youth: An Empirical Study. Unpublished Paper. Zuerich: Swiss Youthbook Institute. (cited as Bonfadelli 1986 b).
- Bower, R.T. (1973). Television and the Public. New York.
- Bower, R.T. (1985). The Changing Television Audience in America. New York.
- Cojuc, J.-R. (1984). How You See is What You Get: Children's Perceptions of Television Effects. Paper Presented to the 1984 International Communication Association, San Francisco, May 1984.

Couzens, M. (1986). Invasion of the People Meters.

Channels of Communications, -, June 1986, 40-45.

Cullingford, C. (1984). Children and Television. New York: St. Martin's Press.

Dahlgren, P. (1986). The Modes of Reception: For a Hermeneuticsof TV News. In: Drummond, Ph. & Paterson, R. (Eds.), Television in Transition. London: British Film Institute.

Dorr, A. (1986). Television and Children. Beverly Hills: Sage.

Dorr, A. (1980). When I Was a Child, I Thought As a Child. In. Withey, S.B. & Abeles, R.P. (Eds.), Television and Social Behavior: Beyond Violence and Children. Hillsdale, N.J.: Lawrence Erlbaum.

Erdogan, I. (1985). Children's Media Use in a Turkish Town. Journal of Broadcasting & Electronic Media, 29, 195-199.

Haefner, M.J., Hunter, L.S., Wartella, E.: Parents, Children and New Media: Expectations, Attitudes and Use. Paper Presented to the 1986 International Communication Association, Chicago, May 1986.

Hakes, D.T. (1980). The Development of Metalinguistic Abilities in Children. Berlin: Springer.

Ianco-Worall, A.D. (1972). Bilingualism and Cognitive Development. Child Development, 43, 1390-1400.

Jaglom, L.M. & Gardner, H. (1981). The Preschool Television Viewer as Anthropologist. In: Kelly, H. & Gardner, H. (Eds.), Viewing Children Through Television. San Francisco: Jossey Bass.

Jaglom, L.M., Fagre, A., Wilder, P.(1980). Preschoolers' Classification of the Televised World. Harvard Project Zero Technical Report No.16. Cambridge, Mass..

Joerg, S. (1987). Per Knopfdruck durch die Kindheit. Weinheim: Quadriga.

Lemish, D. (1987). Viewers in Diapers: The Early Development of Television Viewing. In: Lindlof, Th.R. (Ed.), Natural Audiences: Qualitative Research of Media Uses and Effects. Norwood, N.J.: Ablex Publishing Company.

Levelt, P.B.M. (1981). Voor beeld. Over wat kinderen van tv leren kunnen. Gravenhage: Staatsuitgeverij's 1981. (Stichting voor Onderzoek van het Onderwijs. SVO reeks.41).

Levelt, W.J.M., Sinclair, A., Jarvella, R.J. (1978). Causes and Functions of Linguistic Awareness in Language Acquisition: Some Introductory Remarks. In: Sinclair, A., Jarvella, R.J. & Levelt, W.J.M. (Eds.), The Child's Conception of Language. Berlin: Springer.

Luger, K. (1985). Medien im Jugendalltag. Wie gehen die Jugendlichen mit Medien um-Was machen die Medien mit den Jugendlichen ? Wien: Boehlau.

McMane, A., Krendl, K., Fitzmaurice, M. (1986). Children and Computer Attitude: An Analysis of Gender, Use and Parental Factors Across Seven Grades. Paper Presented to the 1986 International Communication Association, Chicago, May 1986.

Meyer, M. (Ed.) (1983). Children and the Formal Features of Television. Muenchen: Saur.

Piaget, J. (1955). Die Bildung des Zeitbegriffs beim Kinde. Zuerich.

Salomon, G. (1983). Television Watching and Mental Effort. A Social Psychological View. In: Bryant, J. & Anderson, D.R. (Eds.): Children's Understanding of Television. New York: Academic Press.(cited as Salomon 1983 a).

Salomon, G. (1983). Beyond the Formats of Television. The Effects of Student Preconceptions on the Experience of Televiewing. In: Meyer, M. (Ed.), Children and the Formal Features of Television. Muenchen: Saur. (cited as Salomon 1983 b).

Salomon, G. (1984). Television is "Easy" and Print is "Tough". The Differential Investment of Mental Effort in Learning as a Function of Perceptions and Attributions. Journal of Educational Psychology, 76, 647-658.

Salomon, G. & Leigh, T. (1984). Predispositions about Learning from Print and Television. Journal of Communication, 34, 119-135.

Schoenbach, K. (1985). The Role of the Mass Media in West German Election Campaigns. Paper Prepared for Presentation at Conference on Comparative Analysis of the Role of Media in Contemporary Legislative Campaigns, Institute for Social Research, Ann Arbor, Michigan, October 1985.

Selman, R.L. (1982). The Child's Developing Capacity for Self-Reflection: Implications of Research on Reflective Understanding for the Study of Practical Understanding in Troubled Children. In: Serafica, F. (Ed.), Social Cognition and Social Relations in Context. New York: Guilford Press.

- Selman, R.L. & Byrne, D.F. (1974). A Structural Developmental Analysis of Levels of Role Taking in Middle Childhood. Child Development, 45, 803-806.
- Steiner, G.A. (1954). The People Look at Television. New York.
- Sturm, H. (1982). Der rezipienten-orientierte Ansatz in der Medienwirkungsforschung. Publizistik, 27, 89-97.
- Szagun, G. (1980). Sprachentwicklung beim Kind. Muenchen: Urban & Schwarzenberg.
- Winckler, K. (1984). Kommerzielles Fernsehen in der Medienkonkurrenz: USA. Berlin: Spiess.
- Wober, M. (1984). Teens and Taste in Music and Radio. London: Independent Broadcasting Authority, Research Department Working Paper, November 1984.
- Yussen, S.R. (Ed.) (1985). The Growth of Reflection in Children. Academic Press: Orlando.